

GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2021



Submitted by:

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November 4, 2021

Ms. Kelly Davis City Treasurer City of Bluefield 200 Rogers Street Bluefield, WV 24701 Chief Dennis Dillow, Jr.
Pension Board Secretary
City of Bluefield
Policemen's Pension and Relief Fund

Re: City of Bluefield Policemen's Pension and Relief Fund
GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2021

Dear Kelly,

The following report contains the GASB 67 and GASB 68 actuarial information for the City of Bluefield Policemen's Pension and Relief Fund to be included in the City's financial statements for FY 2021. The GASB 67 information has been provided as of June 30, 2021 (the GASB 68 measurement date for FY 2021).

Methodology, Reliance and Certification

This report is prepared for the City. The report contains the actuarial information to be included with the City's financial statements for the year ending June 30, 2021 (the City's fiscal year end date) as required by GASB 68. This information has been prepared for use in the financial statements of the City. This information is not intended for, nor should it be used for, any additional purposes.

The total pension liability is based on the July 1, 2020 actuarial valuation rolled forward to June 30, 2021. The methods, assumptions, and participant data used are detailed in the July 1, 2020 actuarial valuation report with the exception of the actuarial cost method. These calculations are based on the Entry Age Normal cost method as required by GASB 67. The calculation of the Actuarially Determined Contribution (ADC) for the fiscal year ending June 30, 2021 is contained in the July 1, 2019 actuarial valuation report. The discount rate assumption may have changed if a blended rate was used for GASB purposes.

The included calculations are based on the valuation discount rate of 6.25%. The plan's expected gross rate of investment return of 6.25% has been blended with the 1.92% yield corresponding to the 20-year maturity on a municipal general obligation AA bond yield curve published on Fidelity's Fixed Income Market Data webpage as of June 30, 2021. The development of the blended discount rate is included within this report. Since the plan assets are estimated to be sufficient to cover benefit payments throughout the projection period, the liability discount rate used for this June 30, 2021 measurement date is equal to the plan's expected rate of investment return.

The long-term nominal expected rate of return on pension plan investments was determined using a methodology approved by the Municipal Pensions Oversight Board (MPOB) and is based on the funded status (current and projected), equity exposure, and funding policy.

The included calculations assume that the members and the City will continue to make all required contributions in accordance with the City's funding policy.

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Methodology, Reliance and Certification (cont.)

These calculations and comparisons with assets are applicable for the valuation date only. The future is uncertain, and the plan may become better funded or more poorly funded in the future. This valuation does not provide any guarantee that the plan will be able to provide the promised benefits in the future.

This is a deterministic valuation in that it is based on a single set of assumptions. This set of assumptions is one possible basis for our calculations. Other assumptions may be equally valid. The future is uncertain and the plan's actual experience will differ from the assumptions; the differences may be significant or material because the results are very sensitive to the assumptions made and, in some cases, to the interaction between the assumptions. We may consider that some factors are not material to the valuation of the plan and may not provide a specific assumption for those factors. We may have used other assumptions in the past. We will likely consider changes in assumptions at a future date.

The City is responsible for selecting the plan's funding policy based on four methods allowed for under state law. The actuarial valuation methods are chosen by the actuary in accordance with actuarial standards of practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries and as required by GASB 67 & 68. The MPOB selects the asset valuation methods and assumptions; these selections are reviewed by a qualified actuary no less than every five years. The actuary shall provide a report to the Board with recommendations on any changes to the actuarial process. The policies, methods and assumptions used in this valuation are those that have been so prescribed and are described in this report. The City and MPOB are solely responsible for communicating to Bolton Partners, Inc. any changes required thereto.

The City could reasonably ask how the valuation would change if we used a different assumption set or if plan experience exhibited variations from our assumptions. This report does not contain such an analysis. That type of analysis would be a separate assignment.

The cost of this plan is determined by the benefits promised by the plan, the plan's participant population, the investment experience of the plan and many other factors. An actuarial valuation is a budgeting tool for the City or, in this case, a measure of accounting expense. It does not affect the cost of the plan. As the experience of the plan evolves, it is normal for the level of contributions and expense of the plan to change.

We make every effort to ensure that our calculations are accurately performed. We reserve the right to correct any potential errors by amending the results of this report or by including the corrections in a future valuation report.

Because modeling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of calculations to facilitate the modeling of future events in an efficient and cost-effective manner. We may also exclude factors or data that are immaterial in our judgment. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

The valuation was completed using both proprietary and third-party models (including software and tools). We have tested these models to ensure they are used for their intended purposes, within their known limitations, and without any known material inconsistencies unless otherwise stated.



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Methodology, Reliance and Certification (cont.)

This report is based on plan provisions, census data, and asset data submitted by the City. We have relied on this information for purposes of preparing this report, but have not performed an audit. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information. The plan sponsor is solely responsible for the validity and completeness of this information.

The City is solely responsible for selecting the plan's investment policies, asset allocations and individual investments. Bolton Partners, Inc.'s actuaries have not provided any investment advice to the City.

The information in this report was prepared for the internal use of the City, the plan and their auditors in connection with our actuarial valuations of the pension plan as required by GASB 68. This report may not be used for any other purpose; Bolton Partners, Inc. is not responsible for the consequences of any unauthorized use or the reliance on this information by any other party.

The calculation of actuarial liabilities for valuation purposes is based on a current estimate of future benefit payments. The calculation includes a computation of the "present value" of those estimated future benefit payments using an assumed discount rate; the higher the discount rate assumption, the lower the estimated liability will be. For purposes of estimating the liabilities (future and accrued) in this report, an assumption based on the expected long-term rate of return on plan investments is used. If the plan is expected to become insolvent, the return assumption is blended with a long-term municipal bond rate. Using a lower discount rate assumption, such as a rate solely based on long-term bond yields, could substantially increase the estimated present value of future and accrued liabilities.

This report provides certain financial calculations for use by the auditor. These values have been computed in accordance with our understanding of generally accepted actuarial principles and practices and fairly reflect the actuarial position of the plan. The various actuarial assumptions and methods which have been used are, in our opinion, appropriate for the purposes of this report.

The report is conditioned on the assumption of an ongoing plan and is not meant to present the actuarial position of the plan in the case of plan termination. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status), and changes in plan provisions or applicable law.

The undersigned enrolled actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The July 1, 2020 actuarial valuation report contains information that is integral to the results contained herein and a copy may be provided upon request.

Sincerely,

James Ritchie, ASA, EA, FCA, MAAA

Jordan McClane, FSA, EA, FCA, MAAA



Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date



Net Pension Liability of the Employer

The components of the net pension liability of the Employer at June 30, 2021, were as follows:

Total pension liability	\$ 13,407,657
Plan fiduciary net position	 (8,817,402)
Employer's net pension liability	\$ 4,590,255
Plan fiduciary net position as a percentage of the total pension liability	65.76%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2020 rolled forward to June 30, 2021 using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation 2.50 percent

Salary increases Rates vary by years of service

Single discount rate (BOY) 6.00% Single discount rate (EOY) 6.25%

Investment rate of return (BOY) 6.00%, net of pension plan investment expense, including inflation Investment rate of return (EOY) 6.25%, net of pension plan investment expense, including inflation

Long-term municpal bond rate (BOY) 2.45% Long-term municpal bond rate (EOY) 1.92%

Mortality SOA PubS-2010(B) with generational projection using Scale MP-2019

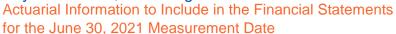
Year Fund is projected to be fully funded
Year assets are expected to be depleted
N/A

for a closed plan

The above is a summary of key actuarial assumptions. Full descriptions of the actuarial assumptions are available in the July 1, 2020 actuarial valuation report.

Sensitivity of the net pension liability to changes in the discount rate

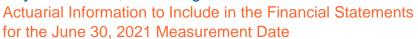
			Current			
	Decrease 5.25%	Dis	scount Rate 6.25%	e 1% Increase 7.25%		
Employer's net pension liability	\$ 6,426,675	\$	4,590,255	\$	3,106,018	





Changes in the Net Pension Liability

	1	ncrease (Decrease)
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/20	\$ 14,341,116	\$ 7,104,226	\$ 7,236,890
Changes for the year:			
Service cost	424,136		424,136
Interest	836,320		836,320
Changes of benefit terms	-		-
Differences between expected and actual experience	165,924		165,924
Changes of assumptions	(1,554,937)		(1,554,937)
Contributions - employer (including Premium Tax Allocation)		713,926	(713,926)
Contributions - member		113,517	(113,517)
Net investment income		1,690,935	(1,690,935)
Benefit payments, including refunds of member contributions	(804,902)	(804,902)	-
Administrative expense		(300)	300
Other			
Net Changes	(933,459)	1,713,176	(2,646,635)
Balances at 6/30/21	\$ 13,407,657	\$ 8,817,402	\$ 4,590,255
Return on Investments		23.8%	





Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2021

Note	Description	Amount
Α	Service cost	\$ 424,136
В	Interest on the total pension liability	836,320
Α	Changes of benefit terms	-
С	Differences between expected and actual experience	43,673
С	Changes of assumptions	(449,989)
Α	Employee contributions	(113,517)
D	Projected earnings on pension plan investments	(426,922)
С	Differences between expected and actual earnings on	(332,122)
	plan investments	
Α	Pension plan administrative expense	300
Α	Other changes in fiduciary net position	-
	Total Pension Expense	\$ (18,121)

Notes:

A Provided in the Changes in Net Pension Liability exhibit.

B Based on the following calculation:

	A	mount for Period (a)	Portion of Period (b)	Interest Rate (c)	E	rojected arnings x (b) x (c)
Beginning total pension liability	\$	14,341,116	100%	6.00%	\$	860,467
Service cost (End of Year)		424,136	0%	6.00%		-
Benefit payments, including refunds of employee contributions		(804,902)	50%	6.00%		(24,147)
Total interest on the total pension liability					\$	836,320

C Provided in the Schedules of Deferrals.

D Based on the following calculation:

	A	Amount for Period (a)	Portion of Period (b)	Projected Rate of Return (c)	E	rojected arnings x (b) x (c)
Beginning plan fiduciary net position	\$	7,104,226	100%	6.00%	\$	426,254
Employer contributions		713,926	50%	6.00%		21,418
Employee contributions		113,517	50%	6.00%		3,406
Benefit payments, including refunds of employee contributions		(804,902)	50%	6.00%		(24,147)
Administrative expense and other		(300)	50%	6.00%		(9)
Total Projected Earnings					\$	426,922





Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2021, the Employer reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	red Outflows Resources	erred Inflows Resources
Differences between expected and actual experience	\$ 694,829	\$ 151,452
Changes of assumptions	-	1,382,275
Net difference between projected and actual earnings	-	
on pension plan investments		1,069,049
Total	\$ 694,829	\$ 2,602,776

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:	
2022	\$ (695,934)
2023	(401,877)
2024	(379,193)
2025	(430,943)
2026	-
Thereafter	-

Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date

Changes in the Employer's Net Pension Liability and Related Ratios Last 10 Fiscal Years

Total pension liability		2021		2020		2019		2018		2017		2016		2015		2014		2013		2012
Service cost	\$	424,136	\$	407,114	\$	390,251	\$	319,814	\$	392,147	\$	220,182	\$	250,953	\$	258,950	\$		\$	
Interest		836,320		775,860		735,057		722,124		679,543		700,256		670,364		662,929		-		
Changes of benefit terms		-		-		-		-		-		-		-		-		-		
Differences between expected and actual experience		165,924		597,973		279,504		89,417		(912,402)		(40,233)		(128,049)		-		-		
Changes of assumptions		(1,554,937)		-		-		-		(833,335)		2,079,763		(696,283)		-		-		
Benefit payments, including refunds of member contributions		(804,902)		(741,643)		(707,898)		(625,051)		(598,019)		(585,237)		(552,719)		(520,150)		-		
Net change in total pension liability		(933,459)		1,039,304		696,914		506,304		(1,272,066)		2,374,731		(455,734)		401,729		-		
Total pension liability - beginning		14,341,116		13,301,812		12,604,898		12,098,594		13,370,660		10,995,929		11,451,663		11,049,934		-		
Total pension liability - ending (a)	\$	13,407,657	\$	14,341,116	\$	13,301,812	\$	12,604,898	\$	12,098,594	\$	13,370,660	\$	10,995,929	\$	11,451,663	\$	-	\$	
Plan fiduciary net position		2021		2020		2019		2018		2017		2016		2015		2014		2013		2012
Contributions - employer (including Premium Tax Allocation)	\$	713.926	\$	687,020	\$	633,528	\$	600,582	\$	583,904	\$	520,935	\$	659,543	\$	543,351	\$	-	\$	
Contributions - member	•	113,517	•	113,231	•	109,496	•	100,599	·	97,183	•	88,383	•	71,722	·	67,170	·	-	·	
Net investment income		1.690.935		376,112		517,785		407,572		486,123		157,192		181,170		379,653		-		
Benefit payments, including refunds of member contributions		(804,902)		(741,643)		(707,898)		(625,051)		(598,019)		(585,237)		(552,719)		(520,150)		-		
Administrative expense		(300)		(300)		-		(300)		(300)		(300)		(300)		(4,643)		-		
Other		` -		` -		(300)		` -		6,214		2,566		` -		` -		-		
Net change in plan fiduciary net position	\$	1,713,176	\$	434,420	\$	552,611	\$	483,402	\$	575,105	\$	183,539	\$	359,416	\$	465,381	\$		\$	
Plan fiduciary net position - beginning		7,104,226		6,669,806		6,117,195		5,633,794		5,058,689		4,875,150		4,515,734		4,050,353		-		
Plan fiduciary net position - ending (b)	\$	8,817,402	\$	7,104,226	\$	6,669,806	\$	6,117,195	\$	5,633,794	\$	5,058,689	\$	4,875,150	\$	4,515,734	\$	-	\$	
Employer's net pension liability - ending (a)-(b)	\$	4,590,255	\$	7,236,890	\$	6,632,006	\$	6,487,703	\$	6,464,800	\$	8,311,971	\$	6,120,779	\$	6,935,929	\$	-	\$	
Plan fiduciary net position as a percentage of the																				
total pension liability		65.76%		49.54%		50.14%		48.53%		46.57%		37.83%		44.34%		39.43%		0.00%		0.009
Covered payroll	\$	1,142,704	\$	1,121,382	\$	1,135,170	\$	955,341	\$	1,025,108	\$	841,730	\$	834,851	\$	837,491	\$	-	\$	
Employer's net pension liability as a percentage of																				
covered payroll		401.70%		645.35%		584.23%		679.10%		630.65%		987.49%		733.16%		828.18%		0.00%		0.009
Expected average remaining service years of all participants		5.00		6.00		6.00		5.44		6.00		4.73		4.74						

Notes to Schedule:

Benefit changes: There were no changes for FY2021.

The discount rate changed from 6.00% to 6.25%. Changes were made to salary scale assumptions, pay spiking assumptions, inflation, cost-of-living increases, mortality rates, retirement rates, termination rates, disability rates, marital status, and non-spouse beneficiary loads. Changes of assumptions:

Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date

Schedule of Employer Contributions

Last 10 Fiscal Years



	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Actuarially determined contribution	\$ 803,530	\$ 752,872	\$ 691,752	\$ 599,307	\$ 612,202	\$ 656,589	\$ 475,033	\$ 524,627	\$ 567,272	\$ -
Contributions in relation to the actuarially determined contribution										
Employer provided	413,519	386,467	361,184	337,555	340,042	270,265	297,006	256,115	239,360	-
State provided	300,407	300,553	272,344	263,027	243,862	 250,670	362,537	287,236	199,023	-
Contribution deficiency (excess)	\$ 89,604	\$ 65,852	\$ 58,224	\$ (1,275)	\$ 28,298	\$ 135,654	\$ (184,510)	\$ (18,724)	\$ 128,889	\$ -
Covered payroll	\$ 1,142,704	\$ 1,121,382	\$ 1,135,170	\$ 955,341	\$ 1,025,108	\$ 841,730	\$ 834,851	\$ 837,491	\$ 811,266	\$ -
Contributions as a percentage of covered employee payroll	62.48%	61.27%	55.81%	62.87%	56.96%	61.89%	79.00%	64.88%	54.04%	N/A

Notes to Schedule

Valuation date:

Actuarially determined contribution amounts are calculated as of the beginning of the fiscal year (July 1) for the year immediately following the fiscal year. Actuarial valuations are performed every year.

Methods and assumptions used to determine contribution rates:

Actuarial cost method Entry Age Normal
Amortization method Level Dollar
Remaining amortization period 30.5 years
Asset valuation method Market Value
Inflation 2.75 percent

Salary increases Rates vary by years of service

Investment rate of return 6.00%, net of pension plan investment expense, including inflation

Retirement age Rates vary by age

Mortality RP-2014 Blue Collar Mortality Table with generational projection using Scale MP-2014



Schedule of Differences between Projected and Actual Earnings on Pension Plan Investments

In conformity with paragraph 33b of Statement 68, the effects of differences between projected and actual earnings on pension plan investments are recognized in pension expense using a systematic and rational method over a closed five-year period, beginning in the current reporting period. The following table illustrates the application of this requirement.

Year	betw and A on F	ifferences een Projected ctual Earnings Pension Plan vestments	Recognition Period (Years)	2017	Ì	2018	2019	ŭ	2020	2021	2022	2023	Ĭ	2024	2025
2017	\$	(205,448)	5	\$ (41,090)		(41,090)	(41,090)		(41,090)	(41,088)					
2018		(67,269)	5		\$	(13,454)	(13,454)		(13,454)	(13,454)	(13,453)				
2019		(149,708)	5				\$ (29,942)		(29,942)	(29,942)	(29,942)	(29,940)			
2020		25,826	5					\$	5,165	5,165	5,165	5,165		5,166	
2021		(1,264,013)	5							\$ (252,803)	(252,803)	(252,803)		(252,803)	(252,801)
Net increa	se (decr	ease) in pension	expense							\$ (332,122)	\$ (291,033)	\$ (277,578)	\$	(247,637)	\$ (252,801)

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Differences between Projected and Actual Earnings on Pension Plan Investments

					Balan June 3			
Year	Investment Earnings Less than Projected (a)	Investment Earnings Greater Than Projected (b)	Amounts Recognized in Pension Expense Through June 30, 2021 (c)	0	Deferred utflows of esources (a) - (c)	Deferred Inflows of Resources (b) - (c)		
2017	\$ -		\$ 205,448	\$	-	\$	-	
2018	-	67,269	53,816		-		13,453	
2019	-	149,708	89,826		-		59,882	
2020	25,826	· -	10,330		15,496		-	
2021	-	1,264,013	252,803		-		1,011,210	
				\$	15,496	\$	1,084,545	



Schedule of Differences between Expected and Actual Experience

In conformity with paragraph 33 a of Statement 68, the effects of differences between expected and actual experience are recognized in pension expense, beginning in the current reporting period, using a systematic and rational method over a closed period equal to the average of the remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees), determined as of the beginning of the measurement period. The following table illustrates the application of this requirement.

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	Prior	2012	2013	2014	Inc 2015		(Decrease) in I	Pension Expense 2017		g from the	Recognition o		ences bet	ween Exp 2021	ected a	nd Actual Exp	ce 2023	2024	2025		2026	There	eafter
Prior	-	-																				-	-		-
2012	-	-																							
2013	-	-																							
2014	-	-																							
2015	(128,049)	4.740139					\$ (27,0	14)	(27,014)	(27,014)	(2	27,014)	(19,993)												
2016	(40,233)	4.728475							\$ (8,509)	(8,509)	((8,509)	(8,509)		(6,197)										
2017	(912,402)	5.995135								\$ (152,190)	(15	52,190)	(152,190)	(1	52,190)	(152,	90)	(151,452)							
2018	89,417	5.441766									\$ 1	16,432	16,432		16,432	16,4	32	16,432	7,257						
2019	279,504	6.000000											\$ 46,584		46,584	46,5	84	46,584	46,584	46,584					
2020	597,973	6.000000												\$	99,662	99,6	62	99,662	99,662	99,662	99,6	63			
2021	165,924	5.000000														\$ 33,	85	33,185	33,185	33,185	33,1	84			
Net increas	e (decrease) in per	nsion expense														\$ 43,6	73	\$ 44,411	\$ 186,688	\$ 179,431	\$ 132,8	47	\$ -	\$	-

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Differences between Expected and Actual Experience

				Balan June 3	ces at 0, 2021
Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense Through June 30, 2021 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$ -	\$ -	\$ -	\$ -	\$ -
2012	-	-	-	-	-
2013	-	-	-	-	-
2014	-	-	-		-
2015	-	128,049	128,049	-	-
2016	-	40,233	40,233	-	-
2017	-	912,402	760,950	-	151,452
2018	89,417	-	65,728	23,689	
2019	279,504	-	139,752	139,752	-
2020	597,973	-	199,324	398,649	-
2021	165,924	-	33,185	132,739	-
				\$ 694,829	\$ 151,452

Actuarial Information to Include in the Financial Statements

for the June 30, 2021 Measurement Date

B

Schedule of Changes of Assumptions

In conformity with paragraph 33a of Statement 68, the effects of changes of assumptions should be recognized in pension expense, beginning in the current reporting period, using a systematic and rational method over a closed period equal to the average of the remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees), determined as of the beginning of the measurement period. The following table illustrates the application of this requirement.

		Recognition		Increase (Decrease) in Pension Expense Arising from the Effects of Changes of Assumptions															
Year	Changes of Assumptions	Period (Years)	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TI
Prior	\$ -	-																	
2012	-	-																	
2013	-	-																	
2014	-	-																	
2015	(696,283)	4.740139					\$ (146,891)	(146,891)	(146,891)	(146,891)	(108,719)								
2016	2,079,763	4.728475						\$ 439,838	439,838	439,838	439,838	320,411							
2017	(833,335)	5.995135							\$ (139,002)	(139,002)	(139,002)	(139,002)	(139,002)	(138,325)					
2018	-	5.441766																	
2019	-	6.000000																	
2020	-	6.000000																	
2021	(1,554,937)	5.000000											\$ (310,987)	(310,987)	(310,987)	(310,987)	(310,989)		
et increas	e (decrease) in pen	sion expense											\$ (449,989)	\$ (449,312)	\$ (310,987)	\$ (310,987)	\$ (310,989)	\$ -	. \$

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Changes of Assumptions

				June 3	ices at 60, 2021
Year	Increases in the Total Pension Liability (a)	Decreases in the Total Pension Liability (b)	Amounts Recognized in Pension Expense Through June 30, 2021 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$ -	\$ -	\$ -	\$ -	\$ -
2012	-	-	-	-	-
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	-	696,283	696,283	-	-
2016	2,079,763		2,079,763	-	-
2017	-	833,335	695,010	-	138,325
2018	-	-	-	-	-
2019	-	-	-	-	-
2020			-	-	-
2021	-	1,554,937	310,987	-	1,243,950
				\$ -	\$ 1,382,275

for the June 30, 2021 Measurement Date

Projection of Pension Plan's Fiduciary Net Position



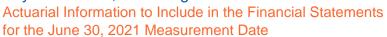
	Gross Normal Cost (BOY)			Empl		Contribu BOY)	tion	s		Emp	loye	er Normal ((BOY)	Cos	it				enses IOY)			Empl		r Contribut (MOY)	tions	5		Prem		ax Alloc	ation		
Fiscal Year	Current Members	Future Members	Total		Current Members		uture embers		Total		Current lembers		Future Members		Total		irrent mbers		iture nbers	Total		Current Members		Future embers		Total		Current embers		ture nbers		Total
2021	\$ 324,125	\$ -	\$ 324,125	\$	100,684	\$	-	\$	100,684	\$	223,441	\$	-	\$	223,441	\$	308	\$	-	\$ 308	\$	413,518	\$	-	\$	413,518	\$	300,406	\$	-	\$	300,406
2022	\$ 311,925	\$ 30,806	\$ 342,731	\$	95,649	\$	10,541	\$	106,190	\$	216,276	\$	20,265	\$	236,541	\$	289	\$	27	\$ 316	\$	421,548	\$	20,916	\$	442,464	\$	285,513	\$	-	\$	285,513
2023	\$ 292,053	\$ 63,246	\$ 355,299	\$	89,033	\$	21,567	\$	110,600	\$	203,020	\$	41,679	\$	244,699	\$	291	\$	33	\$ 324	\$	430,441	\$	42,995	\$	473,436	\$	287,637	\$	-	\$	287,637
2024	\$ 271,114	\$ 108,870	\$ 379,984	\$	82,412	\$	36,774	\$	119,186	\$	188,702	\$	72,096	\$	260,798	\$	287	\$	51	\$ 338	\$	432,211	\$	74,366	\$	506,577	\$	299,926	\$	-	\$	299,926
2025	\$ 258,778	\$ 145,605	\$ 404,383	\$	77,949	\$	49,034	\$	126,983	\$	180,829	\$	96,571	\$	277,400	\$	294	\$	59	\$ 353	\$	442,435	\$	99,602	\$	542,037	\$	306,964	\$	-	\$	306,964
2026	\$ 249,182	\$ 179,403	\$ 428,585	\$	74,269	\$	60,285	\$	134,554	\$	174,913	\$	119,118	\$	294,031	\$	290	\$	72	\$ 362	\$	457,124	\$	122,856	\$	579,980	\$	314,177	\$	-	\$	314,177
2027	\$ 241,372	\$ 211,628	\$ 453,000	\$	71,108	\$	70,991	\$	142,099	\$	170,264	\$	140,637	\$	310,901	\$	279	\$	79	\$ 358	\$	475,535	\$	145,044	\$	620,579	\$	322,198	\$	-	\$	322,198
2028	\$ 234,980	\$ 242,946	\$ 477,926	\$	68,360	\$	81,380	\$	149,740	\$	166,620	\$	161,566	\$	328,186	\$	280	\$	87	\$ 367	\$	497,395	\$	166,625	\$	664,020	\$	331,917	\$	-	\$	331,917
2029	\$ 230,204	\$ 273,846	\$ 504,050	\$	66,070	\$	91,615	\$	157,685	\$	164,134	\$	182,231	\$	346,365	\$	287	\$	89	\$ 376	\$	522,573	\$	187,928	\$	710,501	\$	341,067	\$	-	\$	341,067
2030	\$ 227,045	\$ 303,845	\$ 530,890	\$	64,211	\$	101,541	\$	165,752	\$	162,834	\$		\$	365,138	\$		\$	97	385	\$		\$	208,627	\$	760,236	\$	351,458	\$	-		351,458
2031	\$ 224,880	\$ 333,681	\$ 558,561	\$	- ,	•	111,400	\$	174,018	\$	162,262	\$, -	\$	384,543	\$		\$	113	395	\$, .	\$.,	\$	813,453	\$,	\$	-		359,758
2032	\$ 223,421	\$ 363,702	\$ 587,123	\$		•	121,324	\$	182,545	\$	162,200	\$	242,378	\$	404,578	\$		\$	116	405	\$		\$	249,954		870,395	\$,	\$	-	\$	368,265
2033	\$ 219,701	\$ 393,347	\$ 613,048	\$			130,982	\$	190,194	\$	160,489	\$		\$	422,854	\$		\$	119	408	\$				\$	931,323	\$,	\$	-		377,975
2034	\$ 213,631	\$ 428,601	\$ 642,232	\$		•	142,399	\$	198,991	\$	157,039	\$	286,202	\$	443,241	\$		\$	129	418	\$		\$,	\$	996,516	\$	000,010	\$	-	\$	389,575
2035	\$ 209,669	\$ 464,332	\$ 674,001	\$. ,		154,132	\$	208,657	\$	155,144	\$		\$	465,344	\$		\$	140	421	\$	244,511		319,887		564,398	\$	-	\$	-	\$	-
2036	\$ 182,827	\$ 488,092	\$ 670,919	\$,	•	161,991	\$	209,831	\$	134,987	\$		\$	461,088	\$		\$	144	432	\$		\$	336,281		475,711	\$	-	\$	-	\$	-
2037	\$ 154,755	\$ 529,824	\$ 684,579	\$			175,823	\$	216,625		113,953	\$	354,001	\$	467,954	\$		\$	163	443	\$		\$		\$	482,799	\$	-	\$	-	\$	-
2038	\$ 139,735	\$ 584,744	\$ 724,479	\$	/ -	•	193,958	\$	230,630	\$	103,063	\$	390,786	\$	493,849	\$		\$	184	471	\$	/ -	\$	402,997		509,519	\$	-	\$	-	\$	-
2039	\$ 95,640	\$ 618,906	\$ 714,546	\$	-,		205,023	\$	231,658	\$	69,005	\$	413,883	\$	482,888	\$		\$	197	483	\$		\$		\$	498,232	\$	-	\$	-	\$	-
2040	\$ 70,253	\$ 686,396	\$ 756,649	\$		•	226,642	\$	247,187	\$	49,708	\$,	\$	509,462	\$	285		228	513	\$	- /-	\$	474,132		525,654	\$	-	\$	-	\$	-
2041	\$ 54,286	\$ 740,929	\$ 795,215	\$			243,728	\$	260,248	\$	37,766	\$		\$	534,967	\$	292		234	526	\$			512,737		551,957	\$	-	\$	-	\$	-
2042	\$ 44,901	\$ 789,928	\$ 834,829	\$			258,959	\$	272,784	\$	31,076	\$	530,969	\$	562,045	\$		\$	249	548	\$		\$		\$	579,891	\$ \$	-	\$	-	\$ \$	-
2043	\$ 38,923 \$ 32,071	\$ 833,476 \$ 864,439	\$ 872,399	\$ \$,	•	272,827	\$	284,876	\$ \$	26,874	\$		\$	587,523	\$ \$		\$	274 281	562	\$ \$			578,178		606,167	\$	-	\$	-	\$	-
2044 2045	\$ 22,220		\$ 896,510 \$ 927,696	\$ \$	- ,		282,859 295.643	\$ \$	292,779 302.560	s s	22,151 15.303	\$ \$	581,580 609.833	\$	603,731 625.136	s S		\$ \$	307	576 600	s s		\$		\$ \$	622,887 644.975	ş S	-	Φ.	-	\$	-
2045			\$ 927,090	\$		•	,	\$	313,205	s S	10,745	\$,	\$	648,077	\$ \$		\$	315	615	s s	- ,	\$ \$	657,262		668,638	ş S	-	φ φ	-	\$	-
2046	\$ 9.584	\$ 987.905	\$ 997,489	φ \$	2.878		321.490	э \$	324,368	ş S	6.706	\$		\$	673.121	ş S		\$	332	630	S		\$	687,262		694,467	S	-	φ φ	-	\$	•
2047	,		\$ 1,037,934	\$,	•		\$	336,930	\$	3,602	\$,	\$	701,004	s		\$	362	657	\$, -	•	719,228		723,236	S	-	φ.		\$	-
2049			\$ 1.079.391	\$	848			\$	350,203	\$	2.162			\$	729,188	\$	292		381	673	s	,			\$	752.302	s	_	\$	_	\$	_
2050	\$ 1,763	\$ 1,119,688	\$ 1,121,451	\$	482	*	363.181	\$	363,663	\$	1,281	\$	756,507	\$	757,788	\$		\$	391	\$ 690	s	,	\$	-,	\$	781,800	s	_	\$	_	\$	_
2051		\$ 1,164,129		\$, .	\$	377,545	\$	730	s		\$	787,579	s		\$	411	707	s	,		811,476		812,526	s	_	\$	_	\$	_
2052	\$ 550	\$ 1,209,852		\$			391.686	\$	391,828	\$	408	\$		\$		s	292		433	725	s		\$	843,779		844.492	s	_	\$	_	\$	_
2053	\$ 308		\$ 1,258,062	\$			406,720	\$	406,796	\$	232	\$		\$	851,266	s		\$	444	743	\$		\$		\$	878,208	\$		\$	-	\$	
2054		\$ 1,306,477		\$			422.076	\$	422,111	\$	107	\$		\$	884.508	s		\$	467	762	s				\$	912,492	s	_	\$	_	\$	_
2055	\$ 65	\$ 1,356,825	\$ 1,356,890	\$	16		438,031	\$	438.047	\$	49	\$	918,794	\$	918.843	s		\$	491	\$ 781	\$		\$. ,	\$	947.902	\$		\$	-	\$	
2056	\$ 28		\$ 1,408,427	\$			454,454	\$	454,461	\$	21	\$		\$,.	\$		\$	517	814	\$	319			\$	984,140	\$	-	\$	-	\$	-
2057	\$ -		\$ 1,459,533	\$	-		470,852	\$	470,852	\$	-	\$,	\$	988,681	\$	292		542	834	\$					1,019,943	\$	-	\$	-	\$	-
2058	\$ -		\$ 1,509,938	\$	-	\$	487,305	\$	487,305	\$	-	\$			1,022,633	\$		\$	569	855	\$					1,054,961	\$	-	\$	-	\$	-
2059	\$ -	\$ 1,558,336	\$ 1,558,336	\$	-	\$	503,547	\$	503,547	\$	-	\$	1,054,789	\$	1,054,789	\$	280	\$	596	\$ 876	\$	280	\$ 1	1,087,848	\$	1,088,128	\$	-	\$	-	\$	-
2060	\$ -	\$ 1,606,097	\$ 1,606,097	\$	-	\$	519,872	\$	519,872	\$	-	\$	1,086,225	\$	1,086,225	\$	287	\$	611	\$ 898	\$	287	\$ 1	,120,266	\$	1,120,553	\$	-	\$	-	\$	-
2061	\$ -	\$ 1,658,137	\$ 1,658,137	\$	-	\$	537,606	\$	537,606	\$	-	\$	1,120,531	\$	1,120,531	\$	280	\$	640	\$ 920	\$	279	\$ 1	,155,657	\$	1,155,936	\$	-	\$	-	\$	-

Actuarial Information to Include in the Financial Statement for the June 30, 2021 Measurement Date

Projection of Pension Plan's Fiduciary Net Position



		Actu	arial A	Accrued Liability (BO	OY)	Closed Group Asset Projection												
Fiscal Year	Cur	rent Members	Fu	uture Members	Total	Fid	uciary Net Position (BOY)	Funded Ratio (BOY)		Projected EEC Contributions (MOY)	Pro	ojected ER Contrib + Premium Tax (MOY)	Projected BP (MOY)	Projected Admin Expenses (MOY)	Projected Investment Earnings			
2021	\$	13,076,075	\$	- 5	\$ 13,076,075	\$	7,104,226	54.33%	\$	103,783	\$	713,924 \$	819,517	\$ 308	\$ 443,949			
2022	\$	13,392,974	\$	- 5	\$ 13,392,974	\$	7,546,057	56.34%	\$	98,593	\$	707,061 \$	817,859	\$ 289	\$ 471,244			
2023	\$	13,718,425	\$	32,181	\$ 13,750,606	\$	8,004,807	58.35%	\$	91,773	\$	718,078 \$	845,922	\$ 291	\$ 499,181			
2024	\$	14,014,176	\$	98,832	\$ 14,113,008	\$	8,467,627	60.42%	\$	84,948	\$	732,137 \$	877,838	\$ 287	\$ 527,348			
2025	\$	14,273,266	\$	214,763	\$ 14,488,029	\$	8,933,935	62.59%	\$	80,348	\$	749,399 \$	891,585	\$ 294	\$ 556,459			
2026	\$	14,521,272	\$	372,810	\$ 14,894,082	\$	9,428,262	64.93%	\$	76,555	\$	771,301 \$	894,821	\$ 290	\$ 587,812			
2027	\$	14,771,247	\$	571,634	\$ 15,342,881	\$	9,968,819	67.49%	\$	73,296	\$	797,733 \$	900,068	\$ 279	\$ 622,149			
2028	\$	15,023,139	\$	811,756	\$ 15,834,895	\$	10,561,649	70.30%	\$	70,464	\$	829,312 \$	906,160	\$ 280	\$ 659,898			
2029	\$	15,277,703	\$	1,094,086	\$ 16,371,789	\$	11,214,883	73.41%	\$	68,103	\$	863,640 \$	908,041	\$ 287	\$ 701,651			
2030	\$	15,541,164	\$	1,420,887	\$ 16,962,051	\$	11,939,948	76.83%	\$	66,187	\$	903,067 \$	908,061	\$ 288	\$ 748,121			
2031	\$	15,817,714	\$	1,793,267		\$	12,748,974	80.60%	\$	64,545		943,976 \$	908,078					
2032	\$	16.109.231		2,213,531		\$	13,649,028	84.73%	\$	63,105		988,706 \$	906,865					
2033	\$	16,418,668		2,684,299		\$	14,651,202	89.24%	\$	61,034		1,038,739 \$	913,663					
2034	\$	16,736,485		3,202,324		\$	15,758,442	94.16%	\$	58,334		1,090,952 \$	923,152		* ' ' '			
2035	\$	17,057,935		3,774,665		\$	16,976,140	99.52%	s	56,203		244,511 \$	919,379					
2036	\$	17,399,155		4,406,507		\$	17,399,154	100.00%	s	49,312		139,430 \$	951,257					
2037	\$	17,700,323		5,070,583		\$	17,700,322	100.00%	\$	42,058		117.740 \$	980,627		*			
2038	\$	17,760,323		5,786,067		\$	17,960,212	100.00%	\$	37,801		106.522 \$	998.048					
2039	\$	18.202.430		6,575,507		\$	18,202,430	100.00%	\$	27,455		71.414 \$	1,062,290	•	* ,,			
2039	\$	18.346.716		7,384,362		\$	18,346,715	100.00%	\$	21,177		51,522 \$	1,096,996					
2040	\$ \$	18,437,272		8,266,984		\$	18,437,270	100.00%	\$	17,028		39,220 \$	1,117,280					
2041	\$ \$	18,495,615		9.222.833		\$	18,495,612	100.00%	\$	14,250		32.332 \$						
2042	э \$	18,536,436		10,250,687		\$ \$	18,536,433	100.00%	\$	12,420		32,332 \$ 27,989 \$	1,128,142 1,129,721	•				
									\$ \$									
2044	\$	18,571,829		11,344,026		\$	18,571,826	100.00%		10,225		23,127 \$	1,139,262					
2045	\$	18,592,319		12,466,253		\$	18,592,315	100.00%	\$	7,130		16,067 \$	1,154,903					
2046	\$	18,587,501		13,614,609		\$	18,587,497	100.00%	\$	4,906		11,376 \$	1,160,077					
2047	\$	18,569,914		14,788,714		\$	18,569,909	100.00%	\$	2,967		7,210 \$	1,165,209					
2048	\$	18,539,647		15,990,197		\$	18,539,641	100.00%	\$	1,514		4,008 \$	1,161,345					
2049	\$	18,506,676		17,226,313		\$	18,506,670	100.00%	\$	874		2,520 \$	1,150,219					
2050	\$	18,480,923		18,503,640		\$	18,480,916	100.00%	\$	497		1,619 \$	1,136,181					
2051	\$	18,466,705		19,823,091		\$	18,466,698	100.00%	\$	273		1,050 \$	1,120,026					
2052	\$	18,467,435		21,185,689		\$	18,467,429	100.00%	\$	146		713 \$	1,102,260					
2053	\$	18,486,050	\$	22,592,683	\$ 41,078,733	\$	18,486,043	100.00%	\$	78	\$	538 \$	1,083,178					
2054	\$	18,525,241	\$	24,047,470	\$ 42,572,711	\$	18,525,234	100.00%	\$	36	\$	405 \$	1,063,030	\$ 295	\$ 1,125,115			
2055	\$	18,587,473	\$	25,552,490	\$ 44,139,963	\$	18,587,465	100.00%	\$	16	\$	340 \$	1,041,757	\$ 290	\$ 1,129,657			
2056	\$	18,675,441	\$	27,109,529	\$ 45,784,970	\$	18,675,431	100.00%	\$	7	\$	319 \$	1,019,470	\$ 297	\$ 1,135,840			
2057	\$	18,791,840	\$	28,719,521	\$ 47,511,361	\$	18,791,830	100.00%	\$	-	\$	292 \$	996,198	\$ 292	\$ 1,143,830			
2058	\$	18,939,473	\$	30,380,055	\$ 49,319,528	\$	18,939,462	100.00%	\$	-	\$	286 \$	971,872	\$ 286	\$ 1,153,806			
2059	\$	19,121,407	\$	32,080,536	\$ 51,201,943	\$	19,121,396	100.00%	\$	-	\$	280 \$	946,607	\$ 280	\$ 1,165,954			
2060	\$	19,340,755	\$	33,805,605	\$ 53,146,360	\$	19,340,743	100.00%	\$	-	\$	287 \$	920,395	\$ 287	\$ 1,180,470			
2061	\$	19,600,831	\$	35,546,732	\$ 55,147,563	\$	19,600,818	100.00%	\$	_	\$	279 \$	893.316	\$ 280	\$ 1,197,558			





Projection of Pension Plan's Fiduciary Net Position

	Calculation of Single Equivalent Rate														
Fiscal Year	"Fund	ded" Portion of BP	"Unfun	ded" Portion of BP		PV of "Funded" BP	PV	of "Unfunded'	' BP	PV of BP Using a Single DR					
2021	\$	819,517	\$	-	\$	795,048	\$		-	\$	795,048				
2022	\$	817,859	\$	-	\$	746,767	\$		-	\$	746,767				
2023	\$	845,922	\$	-	\$	726,956	\$		-	\$	726,956				
2024	\$	877,838	\$	-	\$	710,008	\$		-	\$	710,008				
2025	\$	891,585	\$	-	\$	678,707	\$		-	\$	678,707				
2026	\$	894,821	\$	-	\$	641,102	\$		-	\$	641,102				
2027	\$	900,068	\$	-	\$	606,928	\$		-	\$	606,928				
2028	\$	906,160	\$	-	\$	575,093	\$		-	\$	575,093				
2029	\$	908,041	\$	-	\$	542,387	\$		-	\$	542,387				
2030	\$	908,061	\$	-	\$	510,493	\$		-	\$	510,493				
2031	\$	908,078	\$	-	\$	480,473	\$		-	\$	480,473				
2032	\$	906,865	\$	-	\$	451,606	\$		-	\$	451,606				
2033	\$	913,663	\$	-	\$	428,227	\$		-	\$	428,227				
2034	\$	923,152	\$	-	\$	407,223	\$		-	\$	407,223				
2035	\$	919,379	\$	-	\$	381,702	\$		-	\$	381,702				
2036	\$	951,257	\$	-	\$	371,706	\$		-	\$	371,706				
2037	\$	980,627	\$	-	\$	360,642	\$		-	\$	360,642				
2038	\$	998,048	\$	-	\$	345,458	\$		-	\$	345,458				
2039	\$	1,062,290	\$	-	\$	346,065	\$		-	\$	346,065				
2040	\$	1,096,996	\$	-	\$	336,349	\$		-	\$	336,349				
2041	\$	1,117,280	\$	-	\$	322,418	\$		-	\$	322,418				
2042	\$	1,128,142	\$	-	\$	306,402	\$		-	\$	306,402				
2043	\$	1,129,721	\$	-	\$	288,782	\$		-	\$	288,782				
2044	\$	1,139,262	\$	-	\$	274,090	\$		-	\$	274,090				
2045	\$	1,154,903	\$	-	\$	261,509	\$		-	\$	261,509				
2046	\$	1,160,077	\$	-	\$	247,229	\$		_	\$	247,229				
2047	\$	1,165,209	\$	_	\$	233,715	\$		_	\$	233,715				
2048	\$	1,161,345	\$	-	\$	219,238	\$		_	\$	219,238				
2049	\$	1,150,219	\$	-	\$	204,365	\$		_	\$	204,365				
2050	\$	1,136,181	\$	_	\$	189,996	\$		_	\$	189,996				
2051	\$	1,120,026	\$	_	\$	176,277	\$		_	\$	176,277				
2052	\$	1,102,260	\$	_	\$	163,276	\$		_	\$	163,276				
2053	\$	1,083,178	\$	_	\$	151,011	\$		_	\$	151,011				
2054	\$	1,063,030	\$	_	\$	139,485	\$		_	\$	139,485				
2055	\$	1,041,757	\$	_	\$	128,652			_	\$	128,652				
2056	\$	1,019,470	\$	_	\$	118,494	\$		_	\$	118,494				
2057	\$	996,198	\$	_	\$	108,978	\$		_	\$	108,978				
2058	\$	971,872	\$	_	\$	100,063	\$		_	\$	100,063				
2059	\$	946,607	\$	_	\$	91,729	\$		_	\$	91,729				
2060			э \$	-			э \$		_		83,942				
	\$	920,395		-	\$	83,942			-	\$					
2061	\$	893,316	\$	-	\$	76,680	Ъ		-	\$	76,680				